## (19) World Intellectual Property **Organization**

International Bureau





(43) International Publication Date 7 July 2005 (07.07.2005)

PCT

## (10) International Publication Number WO 2005/061796 A3

D21H 21/16, (51) International Patent Classification<sup>7</sup>: 17/72, 11/08 // 17/17, 17/37

(21) International Application Number:

PCT/FI2004/050195

(22) International Filing Date:

22 December 2004 (22.12.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

20031896 23 December 2003 (23.12.2003)

(71) Applicant (for all designated States except US): CIBA SPECIALTY CHEMICALS HOLDING INC. [CH/CH]; Klybeckstrasse 141, CH-4057 Basel (CH).

(72) Inventor; and

(75) Inventor/Applicant (for US only): TAMMI, Anna-Liisa [FI/FI]; Kettutie 4, FI-21530 Paimio (FI).

OY JALO ANT-WUORINEN AB; Iso (74) Agent: Roobertinkatu 4-6 A, FI-00120 Helsinki (FI).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## **Published:**

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 9 September 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CHEMICAL IMPROVEMENT IN PAPER MAKING

(57) Abstract: The invention relates to an improvement in the printability of uncoated mechanical pulp paper grades, especially to an improvement in the printability of supercalendered (SC) papers, particularly in rotogravure printing. In the method according to the invention, a mixture of alkyl ketene dimer and styrene maleic acid anhydride co-polymer is applied onto the paper web in connection with supercalendering.

